

ABSTRACT

A dynamic random access memory (DRAM) structure and a fabricating process thereof are provided. In the fabricating process, a channel region is formed with a doped region having identical conductivity as the substrate in a section adjacent to an isolation structure. The doped region is formed in a self-aligned process by conducting a tilt implantation implanting ions into the substrate through the upper portion of the capacitor trench adjacent to the channel region after forming the trench but before the definition of the active region.